



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/593,146

10/30/2007

Henry Stevens

06999.0077-00000

7558

22852

7590

09/28/2009

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER
LLP

901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413

EXAMINER

ROHRHOFF, DANIEL J

ART UNIT

PAPER NUMBER

3637

MAIL DATE

DELIVERY MODE

09/28/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/593,146	Applicant(s) STEVENS, HENRY	
	Examiner DANIEL ROHRHOFF	Art Unit 3637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 232-270 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 232-270 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the drawings are not clear, and some of them are merely black and white photographs. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 232, 234-247, 255-256, 258-263 & 267-268 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips et al. (US patent application publication 2002/0088379) hereinafter referred to as Phillips, In view of Stevens (US patent 7,026,375).

4. Regarding claim 232, Phillips discloses a pallet wherein the pallet is manufactured substantially from a filled plastics material comprising: at least 10% by weight of a polymer (§ 22); and at least 25% by weight a mineral filler material comprising sand (§ 22). Phillips does not disclose at least 0.1% by weight but less than

Art Unit: 3637

10% by weight a unifier. Stevens teaches a polymer used in manufacturing processes comprising a unifier (residual moisture, Col. 2: line 66-Col. 3: line 42) wherein the unifier makes up at least 0.1% by weight but less than 10% by weight (Col. 3: lines 11-12). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the material of Phillips to include a unifier which makes up at least 0.1% by weight but less than 10% by weight of the material as taught by Stevens, since it would have joined the polymer with the filler.

5. The pallet disclosed in Phillips, as modified by Stevens is capable of carrying a load of at least 50 kilograms.

6. The product-by-process limitation “rotationally-moulded” in the preamble would not be expected to impart distinctive structural characteristics to the load carrying apparatus. Therefore, the claimed load carrying apparatus is not different and unobvious from the pallet of Phillips, as modified by Stevens.

7. Regarding claim 234, Phillips teaches an apparatus wherein the filled plastics material comprises at least 25% by weight polymer (§ 22).

8. Regarding claim 235, Phillips teaches an apparatus wherein the filled plastics material comprises from about 30% to about 70% by weight polymer and from about 70% to about 30% by weight mineral filler material (§ 22).

9. Regarding claim 236, Phillips teaches an apparatus wherein the material comprises at least 0.25% by weight of unifier (Stevens: Col. 3: lines 11-12).

Art Unit: 3637

10. Regarding claim 237, Phillips, as modified by Stevens, teaches an apparatus wherein the material comprises less than 5% by weight of unifier (Stevens: Col. 3 lines 11-12).

11. Regarding claim 238, the product-by-process limitation “unifier is pre-mixed with the mineral filler” would not be expected to impart distinctive structural characteristics to the load carrying apparatus. Therefore, the claimed load carrying apparatus is not different and unobvious from the pallet of Phillips, as modified by Stevens.

12. Regarding claims 239-242, Phillips, as modified by Stevens, teaches the unifier to comprise an internal lubricant comprising a fatty acid amide which is a straight or branched C₁₂-C₂₄ fatty acid amide comprising stearamide (Stevens: Col. 3: lines 30-42).

13. Regarding claims 243 & 267, Phillips, as modified by Stevens, teach the unifier to comprise an external lubricant comprising a stearate (Stevens: Col. 3: lines 56-67).

14. Regarding claim 244, Phillips, as modified by Stevens, teaches an apparatus wherein the unifier comprises less than 20% by weight internal lubricant (Stevens: Col. 3: lines 50-55).

15. Regarding claim 245, Phillips, as modified by Stevens, teaches an apparatus with an internal lubricant. Phillips, as modified by Stevens, does not teach the unifier to comprise about 10% by weight internal lubricant. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus to contain about 10% by weight internal lubricant, since the general condition of the claim are

Art Unit: 3637

disclosed in the prior art, and it is not inventive to discover the optimum or workable ranges by routine experimentation. (see MPEP 2144.05).

16. Regarding claim 246, Phillips teaches the apparatus to be formed substantially in one piece (§ 23 describes how the apparatus is molded in one piece).

17. The product-by-process limitation “rotationally moulded” would not be expected to impart distinctive structural characteristics to the load carrying apparatus. Therefore, the claimed load carrying apparatus is not different and unobvious from the pallet of Phillips, as modified by Stevens.

18. Regarding claim 247, Phillips teaches the apparatus to be a pallet (§ 2).

19. Regarding claim 255, Phillips teaches a pallet further comprising an outer skin layer having an upper surface and a lower surface (§ 6 describes a coated pallet, the coating is the outer layer and obviously will have an upper exposed surface and a lower surface bonded to the pallet).

20. Regarding claim 256, Phillips teaches a pallet further comprising an inner layer having a different composition to the outer skin layer (the inner layer is the pallet and the outer layer is the applied coating as described in § 6).

21. Regarding claim 258, Phillips teaches a pallet wherein the inner layer is comprised of mineral filler material at least 40% by weight (§ 22).

22. Regarding claim 259, Phillips teaches a pallet wherein the outer skin layer comprises more than about 50% by weight polymer (§ 6 describes the outer layer to be a polyurea).

Art Unit: 3637

23. Regarding claim 260, Phillips teaches a pallet wherein the outer skin layer comprises more than about 60% by weight polymer (§ 6 describes the outer layer to be a polyurea).

24. Regarding claim 261, Phillips teaches a pallet wherein the inner layer comprises about 60% by weight a mineral filler material (§ 22).

25. Regarding claim 262, Phillips teaches a pallet wherein the inner layer comprises a greater amount of filler by weight than the outer layer (§ 6 describes the outer layer to comprise of polyurea and the inner layers to contain filler).

26. Regarding claim 263, Phillips teaches the pallet to comprise a pigment (§ 21).

27. Regarding claim 268, Phillips, as modified by Stevens, teaches the apparatus to be a pallet (§ 2).

28. Claims 233 & 266 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips in view of Stevens, as applied to claim 232 above, and further in view of Strebel (US patent 6,083,434).

29. Regarding claims 233 & 266, Phillips, as modified by Stevens, teaches the apparatus as claimed. Phillips, as modified by Stevens, does not teach the polymer to comprise a high density polyethylene (HDPE). Strebel teaches a material comprising a high density polyethylene (Col. 3: line 64-Col. 4: line 12). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the pallet of Phillips, previously modified by Stevens, to include a high density polyethylene as taught by

Art Unit: 3637

Strebel, since it would have adjusted the strength.

30. Claims 248-254 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips in view of Stevens, as applied to claims, 232 & 247 above, and further in view of Alexander et al. (US patent 5,666,886) hereinafter referred to as Alexander.

31. Regarding claim 248, Phillips, as modified by Stevens, teaches the apparatus as claimed. Phillips, as modified by Stevens, does not teach the pallet to comprise a platform and a plurality of feet depending from the platform. Alexander teaches a pallet with a platform (1) and a plurality of feet (5) depending from the platform (Fig. 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Phillips, previously modified by Stevens, to include a platform and a plurality of feet depending from the platform as taught by Alexander, since it would have provided an elevated surface for transporting materials.

32. Regarding claims 249-254, Phillips, as modified by Stevens and Alexander, teaches the apparatus as claimed. Phillips, as modified by Stevens, does not teach a pallet wherein the feet of the pallet are regularly spaced over the lower surface of the platform; the feet are arranged to enable lifting equipment to engage the pallet from any one of four directions; at least one foot is arranged substantially at each corner of the platform of the pallet; at least one foot is arranged substantially at the centre of the platform of the pallet; at least one foot is arranged substantially at the centre of each edge of the platform of the pallet; and each foot has a recess in the lower surface of the foot. Alexander teaches a pallet with a platform (1) and a plurality of feet (5) wherein

Art Unit: 3637

the feet of the pallet are regularly spaced over the lower surface of the platform (Fig. 1); the feet are arranged to enable lifting equipment to engage the pallet from any one of four directions (Fig. 1); at least one foot is arranged substantially at each corner of the platform of the pallet (Fig. 1); at least one foot is arranged substantially at the centre of the platform of the pallet (Fig. 1); at least one foot is arranged substantially at the centre of each edge of the platform of the pallet (Fig. 1); and each foot has a recess (26a) in the lower surface of the foot (Fig. 6). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Phillips, previously modified by Stevens and Alexander, wherein the feet of the pallet are regularly spaced over the lower surface of the platform; the feet are arranged to enable lifting equipment to engage the pallet from any one of four directions; at least one foot is arranged substantially at each corner of the platform of the pallet; at least one foot is arranged substantially at the centre of the platform of the pallet; at least one foot is arranged substantially at the centre of each edge of the platform of the pallet; and each foot has a recess in the lower surface of the foot, as taught by Alexander, since it would have provided an elevated surface for transporting materials which can be moved by a forklift.

33. Claim 257 is are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips in view of Stevens, as applied to claims 232, 246, 255 & 256 above, and further in view of Ettlinger et al. (US patent application publication 2002/0119215) hereinafter referred to as Ettlinger.

Art Unit: 3637

34. Phillips, as modified by Stevens, teaches the apparatus as claimed. Phillips, as modified by Stevens, does not teach the inner layer to comprise a foaming agent.

Ettlinger teaches a pallet to comprise a foaming agent (Col. 3: lines 10-14). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the pallet of Philips, previously modified by Stevens, wherein the inner layer comprises a foaming agent, as taught by Ettlinger, since it would have ensured that the material completely filled the mold cavity.

35. Claims 264-265 & 269 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips in view of Stevens, as applied to claim 232 above, and further in view of Muirhead (US patent application publication 2002/0030597).

36. Regarding claim 264-265 & 269, Phillips, as modified by Stevens teaches the pallet as claimed. Phillips, as modified by Stevens does not teach the pallet to include a remotely readable RFID tag moulded into the surface. Muirhead teach a pallet with a remotely readable RFID tag moulded into the surface of the pallet (¶ 38). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the pallet of Philips, previously modified by Stevens, to include a remotely readable RFID moulded into the surface tag as taught by Muirhead, since it would have allowed the pallet to be tracked and prevented damage to the RFID tag.

Art Unit: 3637

37. Claim 270 is rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips in view of Stevens, as applied to claim 232 above, and further in view of Perry (US patent 5,170,933).

38. Phillips, as modified by Stevens, discloses the apparatus as claimed. Phillips, as modified by Stevens, does not disclose the apparatus to be a freight container. Perry further teaches a pallet (12) with an attachment (36) to make it a freight container (Fig. 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the pallet of Phillips, previously modified by Stevens, to include an attachment to make it a freight container, as taught by Perry, since it would have enclosed the items on the pallet.

Conclusion

39. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kliene (US patent 6,261,490), Strebel (US patent 6,083,434), Lensvelt et al. (US patent 6,437,031), Moore Jr. et al. (US patent application publication 2002/0112653), Nishibori et al. (US patent 6,470,810), Ruma (US patent 5,687,652), Liu et al. (US patent 6,232,374), Melin et al. (US patent 5,205,221), Steinlein et al. (US patent 4,013,021) and Hosoda et al. (US patent 3,814,778) all disclose features similar to those in applicants disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL ROHRHOFF whose telephone number is (571)270-7624. The examiner can normally be reached on M-F 8-5.

Art Unit: 3637

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 571-272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. R./
Examiner, Art Unit 3637
9/16/2009

/Lanna Mai/
Supervisory Patent Examiner, Art Unit 3637